

JOCHELSON, THE KORYAK.

605

dazzling light reflected in spring by the snow-fields. The snow-goggles are made of birch-bark or of wood, with a slit for the eyes.¹ In spring, protection of the eyes is of particular importance to herdsmen, who are constantly in the open air, and to drivers, who undertake to carry merchandise on dog-sledges.

Snow-shoes are of two kinds. One kind are short, and are called "crow-feet" (və[vi-yəgn).² They consist of a willow frame plaited with a thong. Herdsmen and hunters wear these snow-shoes for walking over uneven ground and hard snow. The other kind are long, and are called ti-yəgn.³ They are made of a thinly planed aspen board, with pointed ends and tip turned upwards, and are lined underneath with the skin from reindeer-legs, the hair running backward. These snow-shoes are suitable for level regions, and give a good support on soft snow, thanks to their light weight and large surface. When "crow-feet" snow-shoes are used, the feet are frequently lifted as in walking, while on long snow-shoes gliding alone is resorted to. The Eskimo who, when hunting seal in winter, have to cross rough and hummocky ice, employ snow-shoes similar to the Koryak "crow-feet,"⁴ while the long snow-shoes are used more by hunters like the Tungus or Yukaghir, who hunt wild animals in the forests or river-valleys covered with deep and soft snow.

The Koryak, as a rule, do not make the long snow-shoes themselves, but purchase them from the Tungus. The flesh side of the skin is fastened with fish-glue under the wooden snow-shoes. The edges of the skin are turned over to the upper side.

For smooth and slippery ice, the Koryak tie iron creepers under the soles of their shoes (Fig. 130). In ancient times ice-creepers were made of hard wood or bone.

I rarely saw snow-staffs like those of the Chukchee and Eskimo, with attached ring. The Koryak

use more often ordinary willow rods, such as are employed in their walks from village to village, from camp to camp, or in foot-races (see Plate xxxviii, Fig. 1).

YOKES AND CARRYING-STRAPS. — For carrying loads when going afoot, Koryak men use a wooden lə'tel. It is usually made of alder or of willow, and consists of a flat stick about 50 cm. long, planed, and somewhat bent so as to fit the chest (Fig. 131), with notches at both ends for attaching the

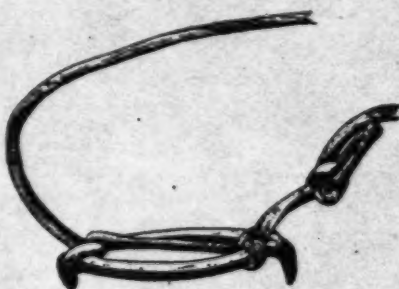


Fig. 130 (vllle). Ice-Creeper. Length, 11 cm.

¹ See Rogers, *The Chukchee*, Vol. VII of this series, Fig. 192, a, A, p. 260.

² *Ibid.*, Fig. 193, A, p. 261.

³ *Ibid.*, Fig. 193, A, p. 261.

⁴ See Nelson, pp. 212-214; Ross, *Barren-Land Eskimo*, pp. 40, 41.

482

loops of straps that are tied to the bag or other burden (Plate xxxv, Fig. 1). In carrying burdens, the yoke or cross-bar is placed over the chest, the straps rest on the fore arms, while the load rests on the small of the back. This is a clumsy method of carrying burdens. The yoke presses against the chest, the straps hinder the motions of the arms, and the burden lies too low on the back. To prevent the yoke from slipping down in walking, it is fastened by means of a thong to the neck or coat-colla.

482
171

While the method used by the men, of carrying loads by means of chest-yokes, is found also among the Eskimo,¹ the method employed by the Koryak



Fig. 131 (5H). Man's Chest-Yoke. Length, 33 cm.

women is met with among many Indian tribes.² The carrying-strap is depicted on codices and monuments of ancient Mexico.³ It is in use among the Ainu. Among the ancient Kamchadal, only the women used the head-band, while the men used the breast-yoke like the Koryak.⁴ The Koryak women put burdens, and also their children, into grass, nettle, or skin bags, which they hold on the back, and carry them by means of a head-band passing across the forehead. Plate xxxvi shows how women carry children on their backs, in a bag or without one, by means of head-bands. The head-band or carrying-strap is made of stout thong-seal hide. Fig. 132 shows the strap

[281]



Fig. 132 (5H). Woman's Carrying-Strap. Length, 108 cm.

stretched out. The small sticks in the middle are inserted to stretch the skin and make it thinner. The ends of the strap are cut out and provided with slits through which to pass the straps of bags and of wooden or skin buckets, for tying (see Plate xxxv, Fig. 2; and Plate xxxvi; also Fig. 160, a).

¹ See Nelson, p. 211; and Meigs, *The Human Beast of Burden*, Fig. 2, p. 256.

² See Meigs, *The Human Beast of Burden*, pp. 262, 263, 265, 268, 273, 277, 282.

³ See Meigs, *Was Middle America peopled from Asia?* (*Popular Science Monthly*, November, 1898, p. 51).

⁴ See Krasheninnikov, II, p. 24.

●482



FIG. 2. WOMAN CARRYING BUCKET.



FIG. 1. MAN CARRYING BAK.

The Koryū
[Facing p. 666: A]

JOCHELSON, THE KORYAK.

635

determining the ornamental style of the bag. The weaving is done by twining two woof-threads over the warp. The end of the woof is gathered in a skein and undone according to need. The weaving continues round the sack from right to left.

Fig. 160 represents flat bags like those on the preceding figure, but finished. In *b* a strip of seal-skin is stitched around the opening of the bag. It is sewed with sinew-thread to the last woof-threads, to which are also fastened the loose ends of the warp. This bag has never been in use, and in the skin strip at the opening are no holes through which to pass the thong which is to close the bag when full (Fig. 160, *a*). The workmanship of these bags exhibits great taste and skill. The ornamentation of the bag is made as follows: at certain intervals among the nettle-threads of the warp there run three threads of sinew, dyed black, which thus form narrow black longitudinal stripes between wider stripes of the light-gray nettle. These alternating stripes of various colors make a pleasing impression. The width of the light stripes varies; and this somewhat disturbs the impression which the ornamentation would produce on the eye if it were executed with greater regularity. The bag is further ornamented with bunches of colored crewel, which are caught in the twining, forming tassels similar to those shown in Fig. 199, *a*. This ornament forms three cross-stripes. Of these, the lower two consist of three rows; the upper one, of four rows.

On the bag marked *a*, instead of the bunches which form the cross-stripes, there is an embroidery of crosses in colored wool, the regular arrangement of which produces a very pleasing effect. The black cross-stripes consist of threads made of the outer bark of *Epilobium angustifolium* dyed in sea-mud.¹ To this bag is attached a woman's carrying-strap or head-band.

The twined bags here described serve for carrying goods on foot-journeys. Women carry them by means of a head-band; men, by means of a chest-yoke.² In them women also carry children (see Plate xxxvi). In the Koryak tongue every bag or basket is called *apke'lin*; baskets with ornamentation, *kele'-a'pkel* ("ornamented baskets"); while the coiled baskets described before are called *tene'-apke'lin* ("sewed basket").

Fig. 161 shows the method of weaving close-twined baskets. *Elymus mollis* is pre-eminently the material used for this purpose; but the work on them is more perfect than the work on coiled baskets of the same straw. The warp is formed by threads of twisted straw of *Elymus mollis*. The weaving is done by twining



Fig. 161 (989). Technique of Twined Basketry.

¹ See p. 628. This method of dyeing textile material black is found also among the Haida (see Munn, *Aboriginal Basket-Work*, p. 297).

² See p. 606.